

ABSTRACT OF THE DISCLOSURE

An optical bio-disc that may be used to test a sample for a target nucleic acid of a prescribed sequence is described. The bio-disc includes a flow channel having target or capture zones, a return channel in fluid communication therewith, and in some embodiments a mixing chamber in fluid communication with the flow channel. The bio-disc may be implemented on an optical disc including an information encoding format such as CD, CD-R, or DVD or a modified version thereof. Methods of manufacturing the optical bio-disc and methods of using the optical bio-disc to detect nucleic acids according to the present invention are also provided.

BLR IRV1050789 4\*-12/21/01 2 46 PM